

**U.S. APPLICATION NO. 09/544,884**

Title: WIRELESS GAMING  
ENVIRONMENT

Filed: April 7, 2000

Attorney Docket No.: IGT1P032/P-267

Inventors: Richard ROWE  
Michael Oberberger

**ALLOWED CLAIMS:**

32. In a transaction server, a method for generating a game service transaction, the method comprising;

receiving a transaction validation request for validating a voucher from a portable hand-held device via wireless communications wherein the validation of the voucher is for allowing the indicia of credit amount stored on the voucher to be exchanged for cash when a game player presents the voucher to a non-game player utilizing the portable hand-held device in a game playing area;

marking the transaction validation request pending;

determining whether to approve or reject the validation of the voucher;

generating a transaction validation reply indicating whether the validation of the voucher has been approved or rejected;

sending the transaction validation reply to the hand-held device via wireless communications.

33. The method of claim 32, further comprising receiving a transaction confirmation from the portable hand-held device and marking the transaction complete.

34. The method of claim 32, further comprising

receiving a second transaction validation request for performing a game service transaction from a portable hand-held device via wireless communications;

marking the transaction validation request pending;

determining whether to approve or reject the game service transaction;

generating a transaction validation reply indicating whether the game service transaction has been approved or rejected;

sending the transaction validation reply to the hand-held device via wireless communications.

35. The method of claim 34, wherein the game service transaction is selected from the group consisting of a prize ticket validation, a food service, an accommodation service, and a prize service and a maintenance service

36. A game service transaction network in a game playing area, the game service transaction network comprising;

one or more gaming machines;

one or more portable hand-held devices providing game service transactions in the game playing area using a wire-less communication interface wherein the portable hand-held devices are adapted for validating a voucher storing an indicia of credit amount and wherein the validation of the voucher is for allowing the indicia of credit amount stored on the voucher to be exchanged for cash when a game player presents the voucher to a non-game player utilizing the portable hand-held device in the game playing area;

one or more transaction servers; and

one or more transaction server transceivers allowing the transaction servers to receive communications from the wire-less communication interfaces on the one or more portable hand-held devices and send communications to the wire-less communication interfaces on the one or more portable hand-held devices

wherein at least the gaming machines are capable of generating the voucher storing the indicia of credit amount.

37. The game service transaction network of claim 36, further comprising one or more transaction relays that allow communications from the hand-held devices to be relayed to the one or more transaction server receivers.

38. The game service transaction network of claim 36, wherein the one or more gaming machines are each selected from the group consisting of video slot, mechanical slot, video black jack, video pai gow poker, video poker and video keno.

54. A method of exchanging an indicia of credit for cash using a portable hand-held device capable of providing one or more types of game service transactions, the method comprising:

in the portable hand-held device, receiving a request for validating a voucher storing an indicia of credit amount wherein the validation of the voucher is for allowing the indicia of credit amount stored on the voucher to be exchanged for cash when a game player presents the voucher to a non-game player utilizing the portable hand-held device in a game playing area and wherein the validation of the voucher is one of the one or more types of game service transactions provided on the portable hand-held device;

sending a game service transaction validation request for validation of the voucher from the portable hand-held device to a transaction server via wireless communications wherein the game service transaction validation request comprises one or more data packets; and

receiving a game service transaction validation reply from the transaction server in the portable hand-held device via wireless communications wherein the game service transaction validation reply approves or rejects the validation of the voucher.

55. The method of claim 54, wherein the portable hand-held device is operable at a plurality of locations within a game playing area.

56. The method of claim 55, wherein the game playing area is one of a casino, a restaurant, a hotel, a bar, a store and combinations thereof.

57. The method of claim 54, wherein the one or more data packets comprise information stored on the voucher used by the transaction server to approve or reject the validation of the voucher.

58. The method of claim 54, wherein the one or more data packets comprise at least one of player tracking information, player identification information and combinations thereof.

59. The method of claim 54, wherein the voucher is selected from the group consisting of a printed ticket, a smart card and a magnetic-striped card.
60. The method of claim 54, wherein voucher is a printed ticket and information used to validate the printed ticket voucher is stored on the printed ticket voucher in a bar-code format.
61. The method of claim 54, wherein the portable hand-held device comprises one or more of a touch screen display, a wireless interface, input buttons, a processor, a memory and combinations thereof.
62. The method of claim 54, further comprising:  
receiving at least one of voucher information or game service transaction information from an input mechanism connected to the portable hand-held device.
63. The method of claim of claim 62, wherein the input mechanism is selected from the group consisting of a card reader, a bar-code reader, a gaming machine, a transaction server, a storage device, a key board, a touch screen, a microphone or a personal digital assistant.
64. The method of claim 54, further comprising:  
outputting at least one of voucher information or game service transaction information to an output mechanism connected to the portable hand-held device.
65. The method of claim 64, wherein the external device is selected from the group consisting of a printer, a personal digital assistant, a smart card, a transaction server, a gaming machine, or a storage device.
66. The method of claim 54, further comprising:  
when the cash has been exchanged, sending a transaction confirmation to the transaction server from the portable hand-held device.

67. The method of claim 54, further comprising:  
when the validation of the voucher is cancelled, sending a transaction cancellation to the transaction server from the portable hand-held device.
68. The method of claim 54, further comprising:  
generating one or more game service interfaces and  
displaying the one or more game service interfaces on a display on the portable hand-held device.
69. The method of claim 68, wherein the one or more game services interfaces are selected from the group consisting of a login interface, an input/output interface, a voucher validation interface, a prize services interface, a food services interface, an accommodation services interface and a gaming operation interface.
70. The method of claim 54, further comprising:  
generating a menu of game service interfaces in the portable hand-held device;  
receiving a selection of a game service interface from the menu of game service interfaces on the portable hand-held device via an input mechanism; and  
displaying the selected game service interface to a display on the portable hand-held device.
71. The method of claim 54, further comprising:  
generating a login interface on a display on the portable hand-held device;  
receiving login information from an input mechanism on the portable hand-held device; and  
authorizing access to the portable hand-held device using the login information.
72. The method of claim 54, further comprising:  
storing records of at least one of approved gaming transactions or approved voucher validations to a memory on the portable hand-held device.

73. The method of claim 72, further comprising:  
comparing the records of the at least the approved gaming transactions or the approved voucher validations stored on the hand-held device to records of approved gaming transactions stored on the transaction server.
74. The method of claim 54, wherein the voucher storing an indicia of credit amount is generated from a play of a game of chance.
75. The method of claim 74, wherein the game of chance is selected from the group consisting of video slot games, mechanical slot games, video black jack games, video pai gow poker games, video poker games and video keno games.
76. The method of claim 54, further comprising:  
in the portable hand-held device, receiving a request to perform a second type of game service transaction different from the validation of the voucher;  
sending the game service transaction validation request for the second type of game service transaction from the portable hand-held device to the transaction server via wireless communications; and  
receiving a game service transaction validation reply from the transaction server in the portable hand-held device via wireless communications wherein the game service transaction validation reply comprises information that at least one of approves the second type of game service transaction or rejects the second type of game service transaction.
77. The method of claim 76, wherein the second type of game service transaction is selected from the group consisting of a prize ticket validation, a food service, an accommodation service, and a prize service and a maintenance service.